2. Trend in supply and final demand

(1) Outline of supply trend for final demand of this quarter

The outline of supply trend for the final demand of this quarter is as follows:

- Due to the increase in personal consumption after five quarters by 1.0% compared to the previous quarter and government consumption by 0.4% id., the supply of all industries for consumption increased 1.0% id. after four quarters.

- Investment for private corporate facilities decreased for six consecutive quarters by 1.3% compared to the previous quarter, investment for private housing decreased by 4.3% id. for two consecutive quarters, and public investment also decreased by 6.4% id. Consequently, since there was a decrease in all demand items, supply of all industries for investment dropped by 3.5% id.

- Exports increased drastically in the previous quarter and the increase for this quarter remained at a level of 0.7% compared to the previous quarter. Imports also increased for two consecutive quarters by 3.8% id.

### Change in the supply indices for all industries

(1995=100, percentage change over previous year, percentage change over previous quarter seasonally adjusted)

<table>
<thead>
<tr>
<th>Industry Type</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate compared to previous year</td>
<td>Rate compared to previous year</td>
<td>Rate compared to previous year</td>
</tr>
<tr>
<td></td>
<td>4Q</td>
<td>7Q</td>
<td>10Q</td>
</tr>
<tr>
<td>Consumption</td>
<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Consumer Consumption</td>
<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Mining and manufacturing industry (goods)</td>
<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Tertiary industry (service)</td>
<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
</tr>
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<td>1.0</td>
<td>0.8</td>
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<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
</tr>
</tbody>
</table>

(Notes) 1. IT-related consumption is consumption related to facsimiles, PHS/mobile telephones, pagers, cordless telephones, personal computers, domestic telecommunications business (mobile communications excluded) and mobile communications, which are also supplied for private consumption.

2. IT-related investments are investments for communication wire and power cables, fiberoptic products for wires and cables, electrostatic indirect copying machines, digital color copying machines, cordless and dial telephones, key service units, facsimiles, electronic automatic exchange, transmission units, fixed communication devices, PHS and mobile telephones, pagers, base station communication devices, general purpose computers, mid-range computers, personal computers, external storage, input-output devices, terminal units, software development and program creation (subcontracts) that are also supplied to private corporate facilities.

3. Exponential calculations are made for various statistical data in order to obtain the supply indices for all industries. Since some flash figures may be utilized as basic data, it must be noted that the indices of the previous quarter may be altered.

4. Retroactive amendments have been made to the supply indices for all industries corresponding the retroactive amendments made for the basic data, the construction cost.

Source: “Supply indices for all industries”
(2) Trend of IT related consumption and investment

IT-related consumption for this quarter dropped by 5.3% compared to the previous quarter while the non-IT-related consumption increased by 1.0% id. after five quarters.

In addition, IT-related investment for private corporate facilities decreased by 5.1% compared to the previous quarter which is a decrease after three quarters. On the other hand, non-IT-related investment increase by 0.9% after seven quarters.

Change in IT related consumption

(Note) IT-related consumption is consumption related to facsimiles, PHS/mobile telephones, pagers, cordless telephones, personal computers, domestic telecommunications business (mobile communications excluded) and mobile communications, which are also supplied for private consumption.

Source: “Supply indices for all industries”

Change in IT related investment

(Note) IT-related investments are investments for communication wire and power cables, fiber optic products for wires and cables, electrostatic indirect copying machines, digital color copying machines, key service units, facsimiles, electronic automatic exchange, digital transmission units, fixed communication devices, PHS and mobile telephones, pagers, base station communication devices, general purpose computers, mid-range computers, personal computers, external storage, input-output devices, terminal units, software development and program creation (subcontracts) that are also supplied to private corporate facilities.

Source: “Supply index for all industries”
The recent trend of consumption spending observed in terms of the indices for supply of all industries for personal consumption (quantity base) classified by application is as follows. As a matter of convenience, the changes in the groups of (1) above 100 points, (2) above 90 points, (3) below 90 points with the index level (1995=100) for the second quarter of 2002 will be observed in order to grasp a rough idea of the medium-term trend.

Through this observation, it is apparent that there are certain characteristics according to the applications. For example, items such as communication expenses (ex. mobile phones), and education and leisure durable goods (ex. personal computers) maintain a high level due to the rapid popularization, food expenses/domestic supplies/services are indispensable and do not show much change, personal effects once showed unfavorable conditions but started to recover recently, and clothing/footgear/travel and lodging/furniture remain to be weak.

Supply index of all industries for personal consumption by application

(1995 – 100, seasonally adjusted)

Over 100 points for the current period.

Over 90 points – less than 100 points for the current period.

Less than 90 points for the current period.

(Note) The index level is a moving average of three periods. Grouping are made appropriately based on the index level of the current period.

Source: “Supply index for all industries”
(4) Trend in employment by form of employment

As a trend, the number of ordinary employees is diminishing and the number of part-time workers is increasing supportively in terms of the environment of employment for regular employees by form of employment. Within such trend, the ratio of part-time workers is at a high level just about to reach over 20% within regular employees.

Furthermore, the factor analysis for personnel expenses shows that the increase in number of part-time workers is contributing to the increase in personnel expenses, however, the unit price of wages is low and does not have much impact. On the other hand, the compression of personnel expenses by the decrease in the number of regular employees is very big. In this manner, companies are compressing personnel expenses and trying to transfer these expenses to variable costs by utilizing part-time workers whose unit wage is low and the number of employees/working hours/working days is relatively easy to adjust.

Trend of regular employment by form of employment

Factorial analysis on labor costs (ratio compared to same quarter of previous period, degree of contribution to growth rate)

Source: "Monthly labor statistics" (Ministry of Health, Labour and Welfare)
(5) Influence to capital investment for orders of machinery

Although the orders for machinery (excludes private demand for marine vessels and electricity) for the second quarter of 2002 has increased by 7.1% compared to the previous quarter after four quarters, the contribution ratios of the manufacturing industry and the non-manufacturing industry are 1.7 points and 4.5 points respectively, indicating that the increase was lead by the non-manufacturing industry.

Orders for machinery (excludes private demand for marine vessels and electricity) is generally considered the leading indicator for capital investment (newly established amount of fixed assets in the “Corporate statistics bulletin”). The average lag for the amount of capital investment has decreased from approximately 3.5 quarters in 1992 to around 1.5 quarters in 2000. In terms of the breakdown, the average lag for the manufacturing industry has gradually shortened to around 2-3 quarters. On the other hand, the average lag for the non-manufacturing industry which consists of approximately 55-60% of the orders for machinery (excludes private demand for marine vessels and electricity) has drastically shortened to around one quarter. One of the factors shortening the average lag is that the composition ratio of electronic communication machinery with a relatively shorter average lag is increasing within the orders for machinery (excludes private demand for marine vessels and electricity).

In addition, the average elasticity of orders for machinery (excludes private demand for marine vessels and electricity) to the amount of capital investment has been relatively flat at a low level since 1996, especially for the non-manufacturing industry marking a low level of around 0.6.

For the manufacturing industry, although the operating ratio for the orders for machinery (manufacturing industry) has turned to an increase in the first quarter of 2002, the operating ratio remains at a lower level compared to the level of operating ratio (first quarter of 2002) when the amount of capital investment (manufacturing industry) turned to an increase last.

From the above and under the premise that the current trend will continue, due to the shortening of the lag, the amount of capital investment may soon hit the bottom. Since the trend is lead by the non-manufacturing industry which elasticity is at a low level, a modest increase may be expected for the amount of capital investment.
Trend of orders in machinery (excludes private demand for marine vessels and electricity) and amount of capital investment
(1995=100, seasonally adjusted)

(Note) Index figures are used to compare the trend of machinery orders (private demand for marine vessels and electricity excluded) and the amount of capital investment.
Source: “Statistical research on orders of machinery” (Cabinet Office), “Corporation statistics bulletin” (Ministry of Finance)

Change in the average lag for order of machinery (excludes private demand for marine vessels and electricity) and amount of capital investment

(Note) Refer to text (p.83) for the methods of calculation.
Source: “Statistical research on orders of machinery” (Cabinet Office), “Corporation statistics bulletin” (Ministry of Finance)
Change in average elasticity of amount of capital investment in terms of order of machinery (private demand for marine vessels and electricity excluded)

(Note) Refer to text (P.85) for the methods of calculation.
Source: “Statistical research on orders of machinery” (Cabinet Office), “Corporation statistics bulletin” (Ministry of Finance)

Trends of operation rate, order of machinery, amount of capital investment in the manufacturing industry (1995=100, seasonally adjusted)

Source: “Statistical research on orders of machinery” (Cabinet Office), “Corporation statistics bulletin” (Ministry of Finance)
(6) Outline of export and import

Trend of export and import

The trend of exports and imports for the second quarter of 2002 indicate that the receipt of services for exports decreased by 0.2% compared to the previous quarter. However, goods (mine and manufacturing industry) marked an increase for two consecutive quarters by 0.9%. Therefore, exports as a total increased for two consecutive quarters by 0.7%.

For imports, goods (mine and manufacturing industry) increased for three consecutive quarters by 3.7% compared to the previous quarter. In addition, payments for services also increased for two consecutive quarters by 7.8%. Therefore, imports as a total increased for two consecutive quarters by 3.8%.

Regionally, exports for East Asia and U.S. decreased and those for ASEAN9 and EU increased. Imports from Other Regions decreased but those from East Asia, ASEAN9, U.S., and EU have increased.

Change in export index by region of destination

Index level (1995=100, seasonally adjusted)

Ratio compared to previous quarter, degree of contribution to growth rate

Change in import by region

Index level (1995=100, seasonally adjusted)

Ratio compared to previous quarter, degree of contribution to growth rate

(Note) 1. The import index is estimated by rearranging the trade statistics with the total supply index groups.
2. The regional classifications are as follows:
   ASEAN 9: Singapore, Thailand, Malaysia, Brunei, Philippines, Indonesia, Vietnam, Laos, and Myanmar.
   East Asia: Korea, China, Taiwan, and Hong Kong.
   Middle East: Iran, Iraq, Bahrain, Saudi Arabia, Kuwait, Qatar, Oman, Israel, Jordan, Syria, Lebanon, the United Arab Emirates, Gaza, and Yemen.
Market expansion in Asia

Exports for East Asia has jumped up in the previous quarter and though maintaining a high level it has slightly decreased for this quarter. Exports for ASEAN9, though at a low level, has marked an increase for two consecutive quarters indicating that exports for Asia is performing well.

The recent contribution ratio of goods for exports to Asia assumed by the total of the exports for East Asia and ASEAN9 indicates that the characteristic of the current increasing phase (since the fourth quarter of 2001) is similar to the previous phase (first quarter of 1999 to third quarter of 2000) in a sense that the increase has been lead by production goods and capital goods, however, what is most characteristic of this phase is that the contribution ratio of consumer durable goods (automobiles) is higher than the previous phase.

In addition, in the current export increasing phase, though most of the increasing items are capital goods and production goods, a wide range of non-IT-related production goods are involved such as light/small automobiles, galvanized steel plates, normal steel strips, paperboards for cartons and basic glass products.

### Change in exports from Japan to Asian nations by goods

![Change in exports from Japan to Asian nations by goods](image)

### Top 20 items for the average contribution rate of export increasing items in the phase of ascending exports

<table>
<thead>
<tr>
<th>Rank</th>
<th>Previous rank</th>
<th>Current rank</th>
<th>Previous rank</th>
<th>Current rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Tracks (railway)</td>
<td>B</td>
<td>Speed sensors</td>
<td>B</td>
</tr>
<tr>
<td>T</td>
<td>Steel vessels</td>
<td>E</td>
<td>Metal oxide semiconductor IC (logic element)</td>
<td>B</td>
</tr>
<tr>
<td>F</td>
<td>Galvanized steel plates</td>
<td>F</td>
<td>Measuring device for semi-conductor/IC</td>
<td>F</td>
</tr>
<tr>
<td>T</td>
<td>Standard steel strips</td>
<td>B</td>
<td>Metal oxide semiconductor IC (logic element)</td>
<td>E</td>
</tr>
<tr>
<td>M</td>
<td>Measuring devices</td>
<td>M</td>
<td>Std steel strips</td>
<td>B</td>
</tr>
<tr>
<td>S</td>
<td>Measuring devices</td>
<td>M</td>
<td>Std steel strips</td>
<td>B</td>
</tr>
<tr>
<td>M</td>
<td>Measuring devices</td>
<td>M</td>
<td>Std steel strips</td>
<td>B</td>
</tr>
<tr>
<td>E</td>
<td>Measuring device for semi-conductor/IC</td>
<td>E</td>
<td>Non-standard transformers</td>
<td>E</td>
</tr>
<tr>
<td>S</td>
<td>Measuring device for semi-conductor/IC</td>
<td>E</td>
<td>Non-standard transformers</td>
<td>E</td>
</tr>
</tbody>
</table>

(Note) 1. B/D/N/P/ given in the table refer to rated items for capital goods, consumer durable goods, non-durable consumer goods and production goods respectively.
2. S/C/M/E/T/O given in the table refer to items from the following industries respectively: iron and steel, chemical, general machinery, electronic machinery, transportation machinery and others.
4. The average contribution rate for the periods is a simple average of the contribution rate compared to the previous
period of every quarter for 3 periods.
The sales amount of Japanese local subsidiaries throughout Asia has been increasing since 1999. As for the breakdown of sales, local sales take up 40% and exports to other regions take up around 35%. Export bound for Japan remains at a level around 25% of total sales. Since the total amount of sales is increasing and local sales maintains a level of around 40%, it may be said that local sales is performing well.

The current trend of demand in terms of the change in GDP of various Asian nations indicates that domestic demand such as personal consumption in China and Korea are performing well.

Though the current export increasing phase for Asia is lead by production goods and capital goods, the biggest difference is that non-IT-related items and consumer durable goods (mainly automobiles) indicate a high contribution ratio.

The domestic demands in the Asian region support this increase. Therefore, it is important to keep observing the trend of domestic demands in Asia.

**Change in sales amount of local subsidiaries and distribution in Asia**

![Graph showing sales amount distribution](image1)

Source: “Corporate Monitoring Research”

**Change of GDP in Asian nations**

![Graph showing GDP change](image2)

Source: “Oversea Economic Data” (Cabinet Office)